

**Additional file 2: Details of included studies**

Reference	Study design and population	Number of patients	Anaemia definition	Associated pathology	Results	Community Nursing home Hospital	Comments
Atti et al. Neurobiol Aging 2006 27:278-284 Sweden	Primary aim to evaluate role of anaemia on development of dementia Longitudinal study (3y) of elderly non-demented subjects Prevalence of anaemia at baseline reported	1377 Men 344 Women 1033	WHO definition and Study defined 5th percentile (men Hb <117 g/L, women <116 g/L) 25th percentile (men Hb <135 g/L, women <129 g/L)	Excl if MMSE <20 at baseline, age >95 y, or unknown educational background	WHO Overall 9.4% Men 15.7% Women 7.3%	Community	At 3y anaemia associated with dementia for subjects with good cognitive function at baseline, but not sig for those with cognitive impairment at baseline
<b>Kungsholmen Project</b>	Community-based, non-demented 75-95 y				5th percentile Overall 4.9% 25th percentile Overall 24.9%		
Culleton et al. Blood 2006 107:3841-3846 Canada	Primary aim of study to determine correlation between anaemia and hospital admission or mortality Prevalence of anaemia reported Individuals independent in community with Hb and creatinine measured >65 y	17030 Women 9471 Men 7559 Mean age 75 y	WHO definition and Hb ≤110 g/L	No restrictions for comorbidity Exclusions were: died within 30 days, and early dialysis	WHO Overall 13% Men 14.3% Women 12.0% 66-70y 8.7% 71-75y 10.9% 76-80y 14.2% 81-85y 20.4% >85y 23.0%	Community	Criterion of measured Hb and creatinine for inclusion could exclude healthiest people Anaemia associated with increased risk of hospital admission and mortality, with higher mortality at lower Hb, with hazard ratios from 1.5 to 4 as Hb fell from 130 to <110 g/L Anaemia more common in patients with diabetes and/or low GFR
					Hb <110 g/L Overall 4.2% 66-70y 2.7% 71-75y 3.0% 76-80y 4.8% 81-85y 7.5% >85y 7.5%		
Denny et al. Am J Med 2006 119:327-334 USA	Primary aim of study to determine relationship between Hb and mortality, cognition and function in elderly Prevalence of anaemia reported Prospective cohort study	1744 Men 610 Women 1134 Mean age 78 y	WHO definition	Excluded those unable/unwilling to give blood sample or unable to give informed consent	Overall 24% Men 24% Women 24% 65-74y 17% 75-79y 25% >80y 32%	Community	African-Americans oversampled (54%) No difference between sexes African-Americans 3x more likely to be anaemic (17.6%) than Caucasians (7%) Anaemia associated with inc risk of mortality over 8 y Strong association with poor physical function and cognitive function., and predictive of decline
<b>(DUKE) EPESE study</b>	Household sample >70 years						
Dharmarajan et al. J Am Med Dir Assoc 2006 7:287-93	Primary aim of study to investigate whether anaemia is associated with falls in elderly patients during hospitalisation for acute care unrelated to a fall. Patients admitted from community and nursing homes.	362 Men 166 Women 196 Mean age 77 y (59-104 y)	WHO definition	None specified	Overall Men 52% Women 42%	Hospital	No significant differences between patients from nursing homes and community Patients who fell were sig more likely to be anaemic

Hammerman-Rozenberg et al. Age Ageing 2006 35:514-517 Israel	Primary aim of study to identify relationship between low dose aspirin and anaemia in 77 y-olds Prevalence of anaemia reported Cross-sectional study using representative cohort of community dwelling individuals	464 Men 237 Women 227 age 77 y	WHO definition	Chronic low dose aspirin used by 29% women and 38% men. Most took 100 mg/day	Age 77 y Overall 17% Men 18.6% Women 15.4%	Community	No details of how studied population was selected: "representative of community dwelling"
<b>Jerusalem Longitudinal Study</b>							
Joosten et al. Gerontology 2006 52: 382-385 Belgium	Primary aim of study to investigate whether anaemia is risk factor for delirium Prevalence of anaemia within 48h of admission reported Hospitalised geriatric population ≥70 y	190 Men 68 Women 122 Mean age 83 y	WHO definition	Excluded if had had red cell transfusion in preceding 3 months All pts had MMSE-12 evaluation in previous study Clinical diagnosis of: infectious disorder in 37%, cardio-respiratory disorder in 20%, neuropsychiatric disorder in 17%	Overall 50% Men 53% Women 48%	Hospital	Claims sig association for anaemia and delirium for men, not women, but small numbers and wide CIs
Loikas et al. Age Ageing 2007 36:177-83, e-pub Dec 2006 Finland	Primary aim to study vit B12 deficiency in elderly Cross-sectional study of whole population ≥65 y (66% participated, 64% had results for anaemia) 6% in long-term institution	1021 Men 423 Women 598  Median age 73 y	Hb <134 g/L (men), <117 g/L (women)	No details of those who did not participate. Those without data for anaemia had vit B12 deficiency diagnosed, and were older and more likely to be institutionalised	Overall 13.4% Men 21.5% Women 7.7%	Community (6% in long-term institution)	May underestimate prev due to excl of vit B12 deficient individuals. Some details of medications
Zamboni et al. Int J Geriatric Psychiatry 2006 21:529-34 Italy	Primary aim of study to determine correlation of Hb and cognitive function on admission to hospital Cross-sectional, consecutive patients admitted in 1993, 1995, 1997 Prevalence of anaemia reported	13301 Men 6651 Women 6650 Mean age 72 y	WHO definition	Excluded those with missing values for Hb or cognitive function	Overall 39.6%	Hospital	May include some patients <65 y, and potential for some patients to be counted >once if readmitted Some details on medical therapy Anaemia more common in patients with cognitive impairment, even when adjusted for age
<b>GIFA study</b>							
De Maria et al. Am J Cardiol 2005 96:1460-1462 Italy	Primary aim of study to investigate prognostic synergism between anaemia and heart disease in nursing home residents Prevalence of anaemia reported (61-104 y)	441 All women Mean age 87 y	WHO definition and Hb ≤110 g/L	Renal function normal in 10.5%, insufficient in 33.5%	WHO Women 49.7%  Hb ≤110 g/L Women 24.5%	Nursing home	2/3 > 85 y No details of how sample obtained Impaired renal function signif assoc with anaemia 1 y mortality inc x3 if anaemia and heart disease present

Penninx et al. JAGS 2005 53:2106-2111 Netherlands	Primary aim of study to examine if anemia is associated with recurrent falls Random sample of primarily community living individuals from one of three regions in main study Prevalence of anaemia reported ≥65 y	394 Men 196 Women 198 Mean age 75 y	WHO definition	None reported here	Overall 11.9% Men 14.9% Women 9.1%	Community	Individuals who did not have Hb measurement were older (3 y) Anaemic individuals were older, had lower BMI, higher creatinine, more comorbidity Anaemia associated with falls
<b>Longitudinal Aging Study Amsterdam</b>							
Skjelbakken et al. Eur J Haematol 2005 74:381-388 Norway	Primary aim of study to determine distribution of anaemia Cross-sectional study Total birth cohort (77% participated) ≥25 y, with subgroup ≥65 y	4228 Men 1785 Women 2443	WHO definition and 2.5% percentile (Hb <129 g/L men, <114 g/L women), and also men Hb <100 g/L, women <90 g/L		WHO criteria Overall 7.1% Men 10% Women 5% 65-74y 4.9% 75-84y 10.0% 85+y 21%  men <110 g/L, women <90 g/L Overall 0.2%	Community	
<b>Tromso Study</b>							
Wang and Shaw. Asia Pac J Clin Nutr 2005 14:278-284 Taiwan	Primary aim of study to assess iron status in elderly population Nationally representative cross-sectional sample of community ("free") living individuals Prevalence of anaemia reported ≥65 y	2354 Men 1202 Women 1152	WHO definition	Excluded if institutionalised	Overall 18.8% Men 18.7% Women 18.9%	Community	Serum ferritin levels sig lower in subgroup with history of GI ulcer than without Other iron indices not associated with ulcer
<b>Elderly NAHSIT study</b>							
Zakai et al. Arch Intern Med 2005 165:2214-2220 USA	Primary aim of study to determine relationship between Hb level and mortality Prospective cohort study of community dwelling individuals Prevalence of anaemia reported ≥65 y	5797 Men 2466 Women 3331 Mean age 73 y	WHO definition	Excluded if institutionalised, wheelchair bound, being treated for cancer, unable to give informed consent	Overall 8.5% Men 9.2% Women 8.1%	Community	Prevalence higher in black (17.6%) than white (7.0%) individuals, and those with more comorbidity Low Hb associated with low BMI and activity level, poor self-reported health, frailty, CHF, stroke, TIA Inc risk of mortality over 11 y (at both extremes of Hb)
<b>Cardiovascular Health Study</b>							
Artz et al. Arch Gerontol Geriatr 2004 39:201-206 USA	Primary aim of study to determine prevalence of anaemia and association with hospitalisation in chronic care residents in skilled nursing homes Modified cross-sectional study (chart review over 6 month period) 87% 65y or more	900 Men 336 Women 564 Mean age 79 y, median age 82 y	WHO definition and Hb <100 g/dL	Excluded if acute rehabilitation resident or "inappropriate for participation"	WHO Overall 48% Men 47% Women 49%  Hb <100 g/L Overall 11.4%	Nursing home	Chart review over 6 months may over-estimate prevalence of anaemia Anaemia associated with x2 rate of hospitalisation (30 vs 15%) Residents with Hb<10g/dL had 55% hospitalisation rate
<b>Choi et al. Am J Haematol 2004 77:26-30 Korea</b>	Primary aim to study prevalence and characteristics of anaemia Cross sectional survey Randomly selected sample of "apparently healthy" community based individuals from urban population 60-95 y	1254 Men 273 Women 981 Median age 70 y	WHO definition		Overall 13.6% Men 9.9% Women 14.7% 60-69 y 7.6% 70-79 y 16.5% ≥80 y 25.4%	Community	Causes of anaemia also investigated  Logistic regression identified independent risk factors for anaemia to be female sex, older age, lower BMI, higher creatinine level, lower albumin level

Guralnik et al. Blood 2004 104: 2263-2268 USA	Primary aim was population study (children and adults, civilian, non-institutionalized) Stratified sampling Sub-group analysis for ≥65 y (oversampling of African Americans and Mexican Americans in this group)	4199 (≥65 y)	WHO definition and Hb <110 g/L	Patients not institutionalised	WHO Overall 10.6% Men 11% Women 10.2% 65-74 y 8% 75-84 y 13% ≥85 y 23%	Community	Anaemia increasingly prevalent with increasing age, usually mild 3x more common in non-Hispanic blacks (27.8%) than non-Hispanic whites (9.0%) and Mexican Americans (10.4%)  Data on causes of anaemia presented
<b>NHANES III</b>							
Nandigam and Nandigam. JAGS 2004 52:1589-1560 India	Case control study of erythrocyte parameters in consecutive patients admitted to hospital for any cause Prevalence of anaemia in cohort of elderly reported ≥65 y	100 Men 37 Women 63 mean age 70 y	WHO definition and Study defined (Hb <120 g/L for men, 115 g/L for women)		Hb<110 g/L Men 1.6% Women 2.8% WHO Overall 72%  Study defined Overall 61%	Hospital	
Penninx et al. JAGS 2004 52:719-724 Italy	Primary aim of study to determine correlation between anaemia and disability, physical performance and muscle strength Stratified random sample from urban population Community dwelling Prevalence of anaemia reported ≥65 y	1008 Men 444 Women 564 Mean age 75 y	WHO definition	Not reported here	Overall 11.3% Men 11.1% Women 11.5%	Community	Anaemia associated with more disabilities, lower physical performance, lower muscle strength, also lower body mass index, lower cognitive function, lower creatinine, presence or history of various diseases
<b>InCHIANTI</b>							
Semba et al. Haematologica 2004 89:357-358 USA	Primary aim of study to investigate iron status and its relation to disability Age-stratified random sample of community-dwelling women representing the one-third most disabled and two-thirds least disabled Community dwelling Prevalence of anaemia reported 70-79 y	679 All women	WHO definition	MMSE ≥18	Women 13.3%	Community	
<b>Women Health and Aging Study I and II</b>							
Coban et al. Acta Haematol 2003 110:25-28 Turkey	Primary aim of study to determine prevalence of iron-deficiency anaemia in elderly people Referrals to secondary-care out-patient clinics Cross-sectional study Prevalence of anaemia reported >65 y	1388	WHO definition	None described	Overall 25%	Community	
Fleming et al. Am J Clin Nutr 2001 73:638-646 USA	Primary aim of study to determine iron status of elderly people Framingham Heart Study originally random selection from census list. This study on surviving members after 40 y Cross-sectional study 67-96 y	1016 Men 411 Women 605 Mean age 76 y	WHO definition by Hct <39% men, <36% women and NHANES III definition Hb<124 g/L men, Hb<118 g/L women	All whites Required adequate serum to determine CRP and iron indices	WHO Overall 16.7% Men 16.0% Women 17.2%  NHANES III Overall 8.7% Men 6.1% Women 10.5%	Community	
<b>Framingham Heart Study</b>							

Mitrache et al. Ann Hematol 2001 80:295-298 Switzerland	Primary aim of study to assess prevalence of anaemia and relate this to nutritional status Consecutive patients admitted to geriatric unit in 1997	186 Men 93 Women 93 Median age 85 y (range 56-100 y, four patients <65 y)	Hb <120 g/L	Four patients younger than 65 y, but had conditions typical for geriatric population	Overall 44.1% Men 43.0% Women 45.2%	Hospital	
Olivares et al. Eur J Clin Nutr 2000 54:834-839 Chile	Primary aim of study to determine prevalence of anaemia and association with diet Cross-sectional study Urban community, "apparently healthy" from low socio-economic level district	274 Men 93 Women 181 Mean age 70 y	WHO definition	Excluded if had any acute or chronic disease, or hospital admission or treatment with any drug or vitamin etc likely to influence haematopoiesis in preceding 6 months	Overall 4.7% Men 5.4% Women 4.4%	Community	Prevalence of anaemia, abnormal iron status, low serum copper and deficient vit B12 very low in both sexes Prevalence of anaemia higher with inflammation (men 22%, women 32%) Hb decreased with age
Spyckerelle et al. Gastroenterol Clin Biol 2000 24:709-713 France	Primary aim of study to determine frequency of iron deficiency in elderly Population undergoing a periodic "Health screening examination" for sickness insurance Prevalence of anaemia reported 60-75 y	6644 Men 3524 Women 3120	WHO definition	Excluded if had blood transfusion within preceding 3 months, current or recent use of dietary supplements  Over 70 y under-represented. Some sectors of society not included	Overall 3.3%	Community	
Izaks et al. JAMA 1999 281:1714-1717 Netherlands  <b>Leiden 85+ Study</b>	Primary aim to determine correlation between Hb and cause-specific mortality in elderly in 10 y prospective study Community-based (home or nursing home) Prevalence of anaemia at baseline reported ≥85 y	755 Men 211 Women 544 Median age 89 y	WHO definition	No exclusion criteria Hb levels available for 74% of eligible sample	Overall 20% Men 28% Women 17%	Community (some in nursing home)	Regression analysis showed association between anaemia and increased mortality (higher mortality with lower Hb) over 5 y, but not for 5-10 y Anaemia associated with disease (malignant neoplasm, peptic ulcer, infection)
Charlton et al. Eur J Clin Nutr 1997 51:424-430 South Africa	Aim to determine prevalence of anaemia and haemopoietic nutrient status in elderly of mixed ancestry Random sample, urban, non-institutionalised ≥65 y	187 Men 88 Women 99 Mean age 74 y	WHO definition	Low income group Excluded if had cognitive impairment based on minimal screening using three questions	Overall 13.9% Men 11.4% Women 16.2%	Community	Mean energy intake sig < RDA 1/3 of anaemic individuals had haemopoietic nutrient deficiencies, including iron
Takasaki et al. Jpn J Geriatr 1997 34:171-179 Japan	Aim of study to investigate the causes, diagnosis and treatment of anaemia in the elderly Subjects undergoing medical examination at hospital geriatric outpatient dept but described as "healthy" ≥65 y	3583 Men 1590 Women 1993	Hb ≤110 g/L	No details	Overall 13%	Community	Abstract only (paper In Japanese) Mean Hb and Hct lower in older age groups

Lesourd et al. Eur J Clin Nutr 1996 50 (Suppl2):S16-S24 Europe	Primary aim of study to determine iron and protein status in elderly Community longitudinal study of free-living elderly subjects Prevalence of anaemia reported at baseline	1921 Men 975 Women 946 age 70-75 y	WHO definition and NHANES II definition (Hb<126 g/L men, <117 g/L women)	No details here	WHO Overall 5.6% Men 5.6% Women 5.5%	Community	
<b>SENECA</b>					NHANES II 4.2%		
Smieja et al. Can Med Assoc J 1996 155:691-696 Canada	Primary aim of study to determine whether anaemia is appropriately documented and investigated for iron deficiency Consecutive medical admissions to secondary care ≥65 Prevalence of anaemia reported	183 Men/Women unknown Mean age 75 y	Hb checked on 2 occasions, on both - Hb <120 g/L men Hb <110 g/L women	Excluded if ≥72 hours after admission or discharged transferred or died within 48 hours	Overall 36%	Hospital	
Ania et al. Mayo Clin Proc 1994 69:730-735 USA	Primary aim of study to compare prevalence of anaemia in the community with referrals to secondary care Cross-sectional study Subgroup ≥65 y (92% of eligible population in community)	N of referral patients not given Olmsted (community) patients 9149 (≥65 y) Men 3436 Women 5713	WHO definition	No exclusion criteria described Population 95% Caucasian	Olmsted patients: 17.6% Men 20.5% Women 15.9%	Community	At least 1 in 4 individuals with Hb ≤110g/L did not have anaemia recorded as diagnosis in medical record
<b>Olmsted county</b>					Insufficient data to analyse referral patients		
Inelmen et al. Aging (Milano) 1994 6:81-89 Italy	Primary aim of study to determine hematological characteristics of an elderly population Cross-sectional study of community-based, apparently healthy individuals Prevalence of anaemia reported ≥65 y	1784 Men 725 Women 1059	WHO definition and Hb ≤120 g/L	None described but patients were not institutionalized	WHO Overall 9% Men 9.4% Women 8.8%	Community	Prevalence of anaemia (WHO) increased with age for all age groups for women, and 70+ for men
<b>VENSE + INESE</b>					Hb ≤120 /L Overall 7.1% Men 2.9% Women 9.9%		
Cooper et al. J Geriatric Drug Ther 1992 6:73-82 USA	Aim to determine nutritional correlates and changes in nursing home residents Chart review of patients in long-term care Prevalence of anaemia on admission reported	175 Men 49 Women 126 Mean age 81 y	not explicitly stated in abstract, probably Hb <120 g/L		Overall 24%	Nursing home	Abstract only
Joosten et al. Gerontology 1992 38:111-117 Belgium	Primary aim of study to determine prevalence and causes of anaemia Consecutive admissions to acute geriatric hospital over 6-month period ≥65 y	732 Men 289 Women 443 Median age 81 y	Hb ≤115 g/L Hb 100-114g/dL Hb <80g/dL	No exclusion criteria described.	Hb ≤115g/dL Overall 24% Hb 100-114 g/dL Overall 14% Hb <80g/dL Overall 3.1%	Hospital	Causes of anaemia identified in 83% cases, mainly anaemia of chronic disease (35%) and iron deficiency anaemia (15%)
Salive et al. JAGS 1992 40:489-496 USA	Primary aim of study to determine relationship between haemoglobin and anaemia with age, gender, health status Cross-sectional, community study Prevalence of anaemia reported ≥71 y	3946 Men 1406 Women 2540	WHO definition	No exclusion criteria described	Overall 13.5% Men 15.2% Women 12.6% 71-74y 8.6% 75-79y 12.4% 80-84y 15.3% 85+y 22.4%	Community	Lower Hb independently associated with older age, black race, low BMI, diagnosis and hospitalisation in previous year for cancer
<b>EPESE (E Boston, Iowa, New Haven)</b>							

Kirkeby et al. Scand J Prim Health Care 1991 9:167-171 Norway	Primary aim of study to determine prevalence of anaemia and its causes Community, patients attending primary care service >70 y	530 Men 108 Women 422 Mean age 79 y	Hb <133 g/L (men) Hb <120 g/L (women)	No exclusion criteria	Overall 14% Men 16% Women 13%	Community	Causes of anaemia investigated Prevalence of anaemia possibly overestimated due to some retesting
Challand et al. Ann Clin Biochem 1990 27(Pt 1):15-20 UK	Primary aim of study to determine prevalence of anaemia and iron deficiency in elderly, and in younger women, presenting to doctor in primary care (GP) Community ≥65 y	307 Men 154 Women 153	WHO definition	No exclusion criteria but attended GP surgery Not taking iron	Overall 16.9% Men 20.1% Women 13.7%	Community	Caucasian
Woo et al. Pathology 1989 21:31-34 Hong Kong	Primary aim of study to determine reference ranges for haematological indices and assess prevalence anaemia in the elderly Community, lower socio-economic group, living independently in social housing ≥ 60 y	427 Men 171 Women 256 Mean age 70 y	WHO definition	Excluded if had any diseases causing anaemia, haemoglobinopathies, any blood test value ±3SD from mean value	Overall 9.6% Men 10.5% Women 9.0%	Community	Population capable of self care and normal active life, but low income, so may not be representative of general population
Nilsson-Ehle et al. Acta Med Scand 1988 224:595-604 Sweden	Primary aim of study to determine haematological values and hence prevalence of anaemia and reference values Representative sample of 70, 75 and 81 y-olds in Gothenburg Baseline prevalence of anaemia reported	312 (age 70 y) Men 148 Women 164  486 (age 75 y) Men 205 Women 281  404 (age 81 y) Men 145 Women 259	WHO definition and population-defined percentiles		WHO 70 y 4.8% Men 5.4% Women 4.2%  75 y 4.5% Men 6.3% Women 3.2%  81 y 10.4% Men 13.1% Women 8.9%	Community	Used for age distribution only
Celestin-Roux et al. J Geriatr Drug Ther 1987 1:63-86 USA  <b>Dunedin Program (Florida)</b>	Primary aim of study to determine incidence, prevalence, risk factors for anaemia. Community-based, longitudinal study with baseline prevalence of anaemia reported ≥65 y	3299 Men 1267 Women 2032	Hb <140 g/L(men) Hb <120 g/L(women)	No exclusion criteria stated	Overall 25.3% 65-69 y Men 53.4% Women 10.7% 70-74 y Men 31.6% Women 7.9% 75-79 y Men 52.3% Women 16.9% 80-84 y Men 55.5% Women 19.4% ≥85 y Men 25% Women 13%	Community	Men had consistently higher levels of anaemia than women (3-5x), probably because of cut off used for men in this study Decrease in Hb with age in both men and women, but more marked in men  Number of medical disorders not sig related to presence of anaemia Inverse relationship between Hb and number of drugs used. No sig associations with particular drugs after adjusting for age

Timiras and Brownstein J Am Geriatr Soc 1987 35:639-643 USA	Primary aim of study to determine prevalence of anaemia and correlation with age Retrospective study of patients attending geriatric screening clinic Community-based ≥60 y	1024 Men 395 Women 629 Mean age 70 y	Hb <140 g/L or Hct <40% (men) Hb <120 g/L or Hct <37% (women)	Excluded if not ambulant or have seen a physician in preceding year	Overall 12% Men 17.7% Women 8.4% 60-64y 8.7% 65-69y 10.6% 70-74y 12.0% 75-79y 12.5% ≥80 y 23%	Community	Authors argue that Hb does NOT change with age but that there is a sex difference. May be due to choice of criteria for anaemia
Mattila et al. Scan J Clin Lab Invest 1986 46:411-415 Finland	Primary aim of study to determine changes in haematological tests with age Population study with 72% participation, included patients in residential homes and hospitals, but most were "relatively fit", with "most" living at home Prevalence of anaemia reported ≥65 y	340 Men 180 Women 160	WHO definition and Hb <120 g/L (men), <115 g/L (women)	None described	WHO Overall 7.6% Men 9.4% Women 5.6%	Community (some in homes or hospital)	
Garry et al. J Am Geriatr Soc 1983 31:389-399 USA	Primary aim of study to determine iron status using various blood components including Hb Prevalence of "low" Hb noted Free-living, "healthy" >60 y	280 Men 131 Women 149 median age 72 y	"low" Hb Men <140 g/L Women <120 g/L	Excluded if had known "serious medical conditions" or taking prescription medication	Men 2.3% Women 0%	Community	White (3% Hispanic) Exclusion of individuals taking any prescription medication probably accounts for low prevalence of anaemia
Campbell et al. NZ Med J 1981 94:209-211 New Zealand	Primary aim of study to determine prevalence and causes of anaemia Random sample of population living in own home, residential homes, or in hospital ≥65 y	557 Men 196 Women 361	Hb <120 g/L Hb <110 g/L		Hb <120 g/L Overall 10.8% Men 4.0% Women 14.4%	Community (some in homes or hospital)	Dietary intake same in anaemic and non-anaemic individuals In women >80 y, Hb dropped significantly with age
Lipschitz et al. Am J Haematol 1981 11:47-54 USA	Primary aim of study to determine prevalence of anaemia in apparently well elderly people, and to document aetiology and evaluate significance Individuals attending community activities for the elderly. Economically deprived community >65 y	222 Men 26 Women 196 mean age 75 y	Hct <40% (men), <36% (women)	Excluded if had admission to hospital in previous year, cancer, inflammatory disorder or chronic disease possibly associated with anaemia, or were taking medication known to affect marrow function (included drugs for diabetes, heart failure, hypertension)	Overall 26% Men 34% Women 21.4%	Community	No sig diff between those taking NSAIDs and those not, except for men aged 65-74 y, who had sig lower Hb (note small numbers) Black 105, white 117 Anaemia more prevalent in blacks than whites (x3)
Kalchthaler and Tan. J Am Geriatr Soc 1980 28: 108-113 USA	Primary aim of study to evaluate anaemia in institutionalised elderly patients Retrospective study of nursing home patients Baseline prevalence of anaemia reported Small number of patients were 41-60 y	161 140 over 60 y	WHO definition	Excluded if did not have full blood count, urinalysis, fecal blood, folate, B12, iron and iron-binding capacity	Overall 31.4 %	Nursing home	